Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural Statistics
1435 Win Hentschel Blvd.
Suite B105
West Lafayette, IN 47906-4145
(765) 494-8371
nass-in@nass.usda.gov

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CROP REPORT FOR WEEK ENDING MAY 29

AGRICULTURAL SUMMARY

Farmers had an excellent week for field activities, according to Indiana Agricultural Statistics. Planting soybeans, spraying chemicals, applying anhydrous ammonia and baling of hay were major activities taking place around the state. Reporters indicate lack of precipitation and cool weather is slowing growth and development in corn and soybean fields. Soil conditions remain very dry in the northern districts. Planting of soybeans advanced ahead of last year's pace. Weeds remain a problem in many fields. First cutting of hay crops was in full swing. Setting of tobacco plants made good progress.

FIELD CROPS REPORT

There were 6.0 **days suitable for fieldwork**. Virtually all of the intended **corn** acreage is now planted. Ninety-two percent of the corn acreage has **emerged** compared with 95 percent last year and 75 percent for the average. Ninety percent of the intended **soybean** acreage is planted compared with 83 percent last year and 70 percent for the average. By area, 96 percent of the soybean acreage is planted in the north, 88 percent in the central region and 81 percent in the south. Sixty-five percent of the soybean acreage has **emerged** compared with 73 percent last year and 55 percent for the average.

Eighty-seven percent of the **winter wheat** acreage is **headed** compared with 96 percent last year and 94 percent for the 5-year average. Winter wheat **condition** is rated 68 percent good to excellent compared with 75 percent last year at this time. First cutting of **alfalfa hay** is 41 percent complete compared with 24 percent last year and 27 percent for the average.

Major activities during the week were tillage of soils, repairing equipment, attending FSA offices, moving grain to market, mowing waterways and roadsides, hauling manure and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 14 percent excellent, 63 percent good, 19 percent fair, 3 percent poor and 1 percent very poor. Livestock are in mostly good condition. Spring calving is winding up.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn Emerged	92	74	95	75
Soybeans Planted	90	73	83	70
Soybeans Emerged	65	37	73	55
Winter Wheat Headed	87	65	96	94
Alfalfa First Cutting	41	13	24	27

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel-lent
			Percent		
Corn	1	8	33	52	6
Winter Wheat 2005	2	6	24	53	15
Pasture	1	3	19	63	14

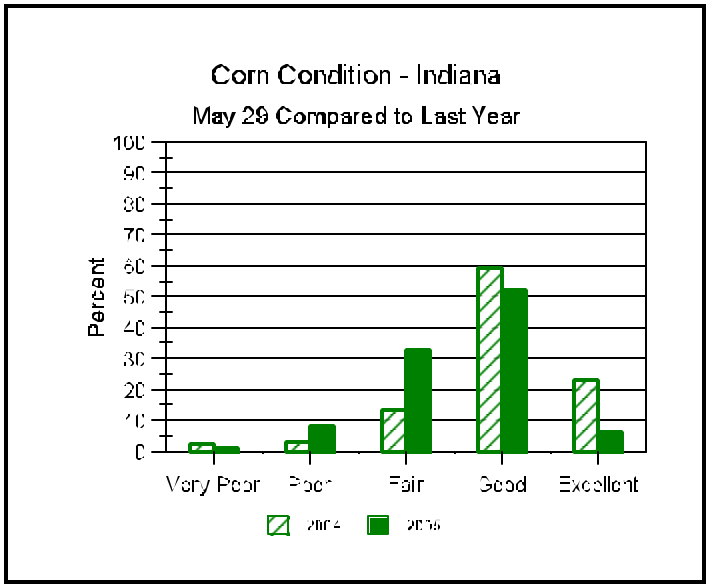
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

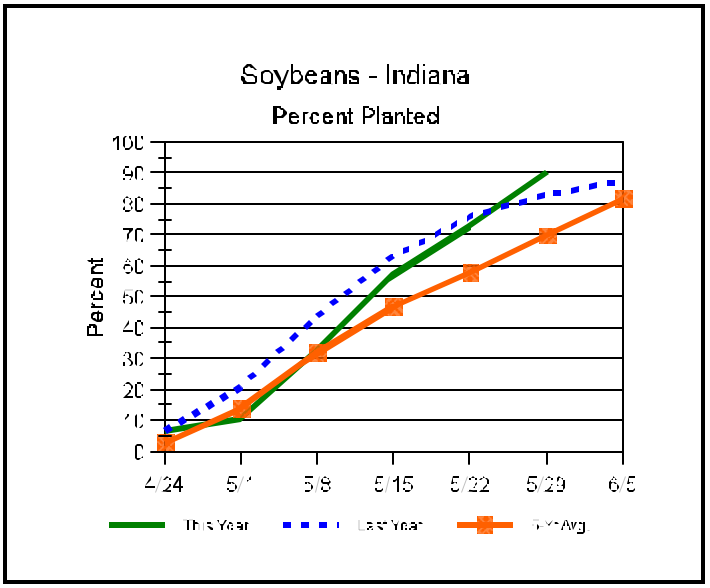
	This Week	Last Week	Last Year
		Percent	
Topsoil			
Very Short	5	2	0
Short	16	6	1
Adequate	71	66	47
Surplus	8	26	52
Subsoil			
Very Short	3	2	1
Short	13	8	5
Adequate	78	73	65
Surplus	6	17	29
Days Suitable	6.0	3.5	2.1

CONTACT INFORMATION

--Greg Preston, Director
--Bud Bever, Agricultural Statistician
E-Mail Address: nass-in@nass.usda.gov
http://www.nass.usda.gov/in/index.htm

Crop Progress





Other Agricultural Comments And News

No-till and Strip-till Corn Shines in 2005

It has been a tough spring for Indiana corn farmers with prolonged cool weather conditions from April 20 to early May, soil crusting, and corn seedling rots resulting from cool and saturated soils. This has lead to many concerns for low or uneven stands, and the challenging decisions about whether to replant corn portions of some fields. Both Bob Nielsen of Purdue and Peter Thomison of Ohio have provided excellent advice about how to handle those decisions. See http://www.agry.purdue.edu/ext/corn/news/articles.05/MedAprilCorn-0522.html. However, the good news is that no-till and strip-till corn have survived this season as well as, or often better than, conventionally tilled corn.

Normally farmers think that if soils are cold with conventional tillage, they will be even worse with no-till in a cool spring. However, a lot depends on the time of day that you measure soil temperature, whether it is cloudy or sunny, just how much residue cover is above the temperature probe, and whether the relative soil moisture content is higher with no-till. Daily maximum soil temperatures during the first 4 weeks after planting are usually about 3° F warmer after chisel plowing than after no-till, and about equal for chisel plowing and strip tillage in the corn row area. Daily minimum temperatures are about equal for all 3 systems, although if any system has an advantage it tends to be no-till. If soils stay moist, daily minimum temperatures in no-till average about 1.0° F higher than with conventional tillage.

This spring, daily average soil temperatures were not substantially lower in no-till unless surface residue cover was very high (such as would be the case if no-till corn followed grain corn). In 2005, no-till corn emerged just a day or two later than conventional tillage on similar soils with common treatment planting dates. Unless there was a problem with seed treatments, no-till corn emergence percentages exceeded 95% of what was planted. In some cases, no-till corn completed emergence sooner because soil crusting limited corn emergence in conventional tillage. No-till soil typically crusts much less than other tillage systems since the soil structure at the surface becomes much more stable as a result of enriched organic matter and the lack of recent tillage operations that break up soil clods (and where it takes time for the bond strengths holding soil clods together - despite intense rain energy - to re-establish themselves). Long-term no-till also has the advantage of a multitude of large continuous pores to help drain the saturated water associated with intense rains. Conventional tillage disrupts these large pores, and can lead to more water ponding, and slower drainage.

In our tillage research plots this year, we planted 32,000 plants per acre in mid-April and achieved about 31,000 in no-till, moldboard and chisel plots in west-central Indiana (West Lafayette) and about 29,000 in no-till versus 27,000 in chisel in north-eastern Indiana (Columbia City). So, if anything, the corn stands in no-till are at least as good as those in conventional tillage. Our population results this year are not unusual. In fact, no-till corn stand establishment has never been significantly lower than that conventional tillage in over 80 comparisons conducted in the last 20 years. Simply put, we are more successful in getting good

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Weather Information Table

Week ending Sunday May 29, 2005

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg 4 in Soil	April 1, 2005 thru May 29, 2005 Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	83	46	63	-3	0.00	0		3.13	-4.15	16	463	-5
Valparaiso_AP_I	80	45	59	-5	0.00	0		2.41	-5.15	16	406	+22
Wanatah	81	40	59	-4	0.07	1		3.01	-4.20	18	354	+16
Wheatfield	79	45	61	-4	0.19	4		4.75	-2.25	30	397	+34
Winamac	78	44	60	-5	0.07	2	65	3.06	-3.90	22	430	+22
North Central(2)												
Plymouth	78	42	59	-6	0.14	2		2.52	-4.88	21	370	-60
South_Bend	77	42	59	-5	0.03	1		2.13	-4.68	19	409	+46
Young_America	78	46	61	-4	0.08	2		4.52	-2.45	17	458	+54
Northeast (3)												
Columbia_City	73	43	59	-5	0.26	3	63	3.24	-3.66	20	360	+23
Fort_Wayne	75	45	59	-5	0.48	4		3.93	-2.65	24	385	+2
West Central (4)												
Greencastle	80	43	62	-6	0.00	0		8.10	-0.03	19	440	-73
Perrysville	82	44	64	-2	0.00	0	69	5.55	-2.10	15	526	+75
Spencer_Ag	80	46	62	-4	0.09	1		7.74	-0.79	21	435	-21
Terre_Haute_AFB	82	48	63	-4	0.12	1		6.68	-1.42	21	533	+25
W_Lafayette_6NW	82	44	62	-3	0.00	0	68	3.84	-3.52	19	488	+78
Central (5)												
Eagle_Creek_AP	80	49	63	-4	0.02	1		6.05	-1.41	21	598	+101
Greenfield	76	46	61	-5	0.38	3		7.94	-0.12	23	435	-17
Indianapolis_AP	78	47	62	-5	0.02	1		7.13	-0.33	21	518	+21
Indianapolis_SE	77	44	60	-6	0.06	1		6.79	-1.11	21	456	-21
Tipton_Ag	75	46	61	-3	0.13	2	67	6.41	-1.07	21	379	+6
East Central(6)												
Farmland	76	44	61	-3	0.06	2	58	5.93	-1.18	20	373	+13
New_Castle	74	44	58	-6	0.35	2		7.85	-0.36	17	314	-57
Southwest (7)												
Evansville	83	48	65	-5	0.20	1		4.46	-4.03	17	643	-12
Freelandville	82	52	65	-2	0.18	1		5.34	-3.27	17	594	+56
Shoals	82	49	64	-3	0.25	2		7.29	-1.76	21	572	+53
Stendal	84	50	65	-3	0.19	1		6.70	-2.61	19	668	+77
Vincennes_5NE	83	49	65	-2	0.24	1	67	8.38	-0.23	19	623	+85
South Central(8)												
Leavenworth	81	48	64	-3	0.19	1		7.05	-2.06	17	600	+75
Oolitic	80	46	62	-4	0.32	1	68	8.02	-0.50	21	481	+8
Tell_City	81	51	67	-2	0.11	1		7.03	-2.29	17	725	+118
Southeast (9)												
Brookville	79	47	62	-3	0.14	1		6.61	-1.61	19	467	+52
Milan_5NE	77	47	62	-4	0.35	3		7.19	-1.03	25	463	+48
Scottsburg	80	47	63	-5	0.24	1		7.61	-0.77	21	556	+14

DFN = Departure From Normal (Using 1961-90 Normals Period).
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

The above weather information is provided by AWIS, Inc.
For detailed ag weather forecasts and data visit the AWIS home page at
www.awis.com

stands with no-till now because we have better planters, better seed treatments, and more stress-tolerant hybrids than we did 30 years ago.

And fall strip-till corn is really shining this year; it is off to a faster start than either no-till or chisel plow corn in Northern Indiana. Strip-till corn has the same reduction in soil crusting as no-till, but generally has the advantage of much warmer and drier seedbeds than no-till. To achieve the most optimum seedbed conditions with strip-till, it really helps if the planting operation left a level or slightly raised soil berm. Planting into a trench with overly aggressive soil cleaners will lead to cooler soil temperatures and wetter conditions around the seed. Strip-till's main advantages, though, are the additional planting flexibility (versus no-till), the high residue cover it leaves between the rows, and the opportunity it provides for deep fertilizer banding.

No Tillage: The Best Tillage Choice for Replanting

If replanting is necessary, no-till is by far the best option available. It takes the least time, results in the least likelihood of cloddy seedbeds that could result in uneven emergence, best preserves the benefits of any previously applied herbicides and starter fertilizer, requires less fuel, and has even less chance of reducing corn yields (relative to conventional-till) in late May planting versus planting in early to mid-April. So, even if you didn't no-till plant corn the first time, it is not too late to start. You may need a more robust planter, though, to achieve sufficient down pressure on the planting units to penetrate hard crusts on clay soils.

Summary:

No-till corn and strip-till corn have both survived the test of this difficult spring. In fact, they in many cases out-performed fields that were field cultivated just ahead of planting. Our yield results aren't in yet for this year but, if it is consistent with previous years, no-till corn will yield within 5 bushels per acre of conventionally tilled corn planted after soybean. Strip-till corn will yield at least as good as conventionally tilled corn. Both systems will generally increase profits as long as planting isn't delayed substantially. No-till is the tillage option of choice for any replanting of corn that is still required. Furthermore, fears of a cool spring are not a justifiable reason to avoid preparing for either no-till or strip-till corn production in 2006.

Tony J. Vyn, Department of Agronomy, Purdue University. Email: tvyn@purdue.edu. This article also has a photo, which can be viewed at: http://www.agry.purdue.edu/ext/corn/news/articles.05/Vyn-Notill-0523.pdf.

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